

What is claimed is:

1. A combination comprising a plurality of cDNAs that are differentially expressed in activated vascular tissue, wherein the cDNAs are SEQ ID NOs:1-850 or their complements.
2. The combination of claim 1, wherein each of the cDNAs is differentially expressed at least 2.5-fold in activated vascular endothelium and is selected from the group consisting of SEQ ID NOs:1-205, 438-760, and 813-850.
3. The combination of claim 1, wherein each of the cDNAs is differentially expressed at least 2.5-fold in activated vascular smooth muscle and is selected from the group consisting of SEQ ID NOs:1-15, 206-461, and 761-850.
4. The combination of claim 1, wherein each of the cDNAs is differentially expressed at least 2.5-fold in activated vascular endothelium and smooth muscle and is selected from the group consisting of SEQ ID NOs:1-15 and 813-850.
5. The combination of claim 1, wherein the cDNAs are immobilized on a substrate.
6. A high throughput method for detecting differential expression of one or more cDNAs in a sample containing nucleic acids, the method comprising:
  - a) hybridizing the combination of claim 1 with nucleic acids of the sample, thereby forming one or more hybridization complexes;
  - b) detecting the hybridization complexes; and
  - c) comparing the hybridization complexes with those of a standard, wherein differences between the standard and sample hybridization complexes indicate differential expression of cDNAs in the sample.
7. The method of claim 6, wherein the nucleic acids of the sample are amplified prior to hybridization.
8. A high throughput method of screening a plurality of molecules or compounds to identify a molecule or compound which specifically binds a cDNA of the combination, the method comprising:
  - a) contacting the combination of claim 1 with the plurality of molecules or compounds under conditions to allow specific binding; and
  - b) detecting specific binding between a cDNA and at least one molecule or compound, thereby identifying a ligand that specifically binds to a cDNA.
9. The method of claim 8 wherein the plurality of molecules or compounds are selected from DNA molecules, RNA molecules, peptide nucleic acid molecules, mimetics, peptides, transcription factors, repressors, and regulatory proteins.
10. An isolated cDNA selected from SEQ ID NOs:13-15, 170-205, 372-437, 669-760, 794-812, and 846-850.
11. A vector containing the cDNA of claim 10.
12. A host cell containing the vector of claim 11.

13. A method for producing a protein, the method comprising the steps of:

- a) culturing the host cell of claim 12 under conditions for expression of protein; and
- b) recovering the protein from the host cell culture.

14. A protein or a portion thereof produced by the method of claim 13.

5 15. A high-throughput method for using a protein to screen a plurality of molecules or compounds to identify at least one ligand which specifically binds the protein, the method comprising:

- a) combining the protein of claim 14 with the plurality of molecules or compounds under conditions to allow specific binding; and
  - b) detecting specific binding between the protein and a molecule or compound, thereby identifying a
- 10 ligand which specifically binds the protein.

16. The method of claim 15 wherein the plurality of molecules or compounds is selected from DNA molecules, RNA molecules, peptide nucleic acid molecules, mimetics, peptides, proteins, agonists, antagonists, antibodies or their fragments, immunoglobulins, inhibitors, drug compounds, and pharmaceutical agents.

17. A method of using a protein to produce and purify an antibody, the method comprising:

- a) immunizing an animal with the protein of claim 14 under conditions to elicit an antibody response;
- b) isolating animal antibodies;
- c) contacting the isolated antibodies with the protein; thereby forming protein:antibody complex;
- d) dissociating the protein from the complex; and
- e) collecting purified antibody

18. A purified antibody produced by the method of claim 17.

19. A method for using an antibody to detect a protein in a sample comprising:

- a) combining the antibody of claim 18 with a sample under conditions to allow specific binding; and
- b) detecting specific binding, wherein specific binding indicates the presence of the protein in the

25 sample.

20. A method of using an antibody to purify a natural or recombinant protein from a sample, the method comprising:

- a) combining the antibody of claim 18 with a sample under conditions to allow specific binding; and
- b) separating the antibody from the protein, thereby obtaining purified protein.